Application No.: 10/678,714

Office Action Dated: August 24, 2006

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

REMARKS

The foregoing Amendment After Final and the following Remarks are submitted in response to the Final Office Action issued on August 24, 2006 in connection with the above-identified patent application, and are being filed within the three-month shortened statutory period set for a response by the Final Office Action.

Claims 1, 3-5, 7, 8, 12, 13, 15, and 16 remain pending in the present application. Claims 2, 6, and 14 have been canceled. Independent claims 1, 5, 12, and 13 have been amended. Applicants respectfully submit that no new matter has been added to the application by the Amendment.

The Examiner has again rejected claims 12-16 under 35 USC § 101 as being directed to non-statutory subject matter. In particular, the Examiner states that the claims are not directed to tangible subject matter such as hardware inasmuch as the system recited could be tangible or intangible. Accordingly, Applicants have amended the claims to refer to a computer hardware system, which is believed to be tangible. As a result, Applicants respectfully request reconsideration and withdrawal of the § 101 rejection.

The Examiner has again rejected the claims under 35 USC § 102 as being anticipated by Braumandl et al. (ObjectGlobe, VLDB Journal 10: 48-71 (2001)). Applicants respectfully traverse the § 102 rejection insofar as it may be applied to the claims as amended.

To summarize, the claims recite a web server that can receive a search request that is to be directed to more than just one search provider. Instead, the search request can be directed to any one of a plurality of search providers, or can be directed to more than one of the plurality of search providers. However, it is to be appreciated that each search provider

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operates based on a different interface, and thus should receive a search request in a particular format, return search results in a particular format, and have particular options.

The web server cannot and should not be expected to know the particular interface requirements of every search provider, especially if the search providers can change on a regular basis. Accordingly, a search framework is provided that manages the search providers that can service a search request at the web server. In particular, the search framework for each available search provider registers same and in doing so collects and maintains all necessary interfacing information, and also provides same to the web server as needed.

A search as received at a web server is to be directed to one or more search providers, and the search framework detects same and determines a corresponding search method that is to be employed for each such service provider. The search framework then provides such search methods to the web server as a 'ubiquitous' search method for performing the search utilizing each such search method, and responds to a call from the web server to the ubiquitous search method by performing the search on the selected search provider utilizing each corresponding search method.

Thus, the search framework customizes the call based on each search provider that is to perform a search based on the corresponding received search, sends the customized call to the web server which then calls same upon the search framework. Such framework then executes the call by executing each search method within the call. As such, the search framework is closely involved with all aspects of the call and can control and monitor same. More importantly, the complexities of dealing with the possibly heterogeneous searches provided by search providers are avoided by the web server, which instead merely issues a

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single call as a ubiquitous search method that is employed to access all of the appropriate

search providers in an appropriate manner.

As amended, independent claims 1, 5, 12, and 13 now recite that the search

framework:

is interposed between (i.e., inserted or placed between) the web server

and each of the search providers,

registers first and second response formats for receiving search results

from first and second search providers, and

- responds to a call from the web server by performing a search on each

selected search provider utilizing the corresponding search method, receiving a search result

from the selected search provider in a response format corresponding to said selected search

provider, and providing the received search result to the web server in a ubiquitous format.

Thus, it should be clear from the claim as amended that the recited search

framework as interposed between the web server and each search provider acts as the conduit

through which all information passes between such web server and each such search

provider.

The Braumandl reference discloses in pertinent part ubiquitous query

processing on the Internet in which a client such as a web server can execute complex queries

involving execution at multiple heterogeneous data sources, as is the case with the subject

matter of the present application. As best shown in Fig. 2 and set forth in connection with

section 2.2, data providers provide the data and function providers provide functions for

accessing the data from the data providers in particular formats, all according to a query plan

compiled based on a particular search request.

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Significantly, the Braumandl query plan is generated by a lookup service that parses the search request and then searches for relevant data sources in a meta-data repository. As the Examiner notes, such lookup service is akin to the search framework recited in the claims, at least in this particular respect. Notably, though, the Braumandl lookup service is not shown and described as being interposed between a web server and each search provider, as is recited in the claims of the present application. Instead, and as seen in Fig. 1 of the Braumandl reference, such lookup service is off to the side and is only referenced by the Braumandl web server when constructing a query, after which the lookup service is no longer involved in the search.

Accordingly, such non-interposed Braumandl lookup service does not and would not register first and second response formats for receiving search results from first and second search providers, especially inasmuch as such lookup service does not receive any search results. Also, such lookup service does not respond to a call from the web server by performing a search on each selected search provider utilizing the corresponding search method, inasmuch as the Braumandl web server performs such search directly, and is not disclosed as receiving a search result from the selected search provider in a response format corresponding to said selected search provider, and providing the received search result to the web server in a ubiquitous format, inasmuch as the Braumandl web server receives the search results directly without the use of the Braumandl lookup service.

Thus, inasmuch as the Braumandl lookup service does not provide all the functions of the search framework as recited in the claims of the present application,

Applicants respectfully submit that the Braumandl reference cannot be said to disclose all of the recited features of the claims of the present application. As a result, Applicants

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respectfully submit that the Braumandl reference does not anticipate the claims of the present application and accordingly Applicants respectfully request reconsideration and withdrawal of the § 102 rejection.

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In view of the foregoing discussion, Applicants respectfully submit that the present application including claims 1, 3-5, 7, 8, 12, 13, 15, and 16 is in condition for allowance, and such action is respectfully requested.

Date: October 26, 2006

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